A Pooled Analysis of the CANDELA, PHOTON, and PULSAR Trials Through 96 Weeks: Comparably Low Intraocular Inflammation-related Events With Aflibercept 8 mg and 2 mg

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Disclosures

- **Justus G. Garweg** has served as a consultant/speaker for AbbVie, Bayer, Novartis, and Roche; and has received research funding from Bayer, Novartis, and Roche
  - **DD** is a consultant for Boehringer Ingelheim, Genentech, Kodiak Sciences, Kriya, and Regeneron Pharmaceuticals, Inc.; has received research funding from Boehringer Ingelheim, Genentech, Kriya, and Regeneron Pharmaceuticals, Inc.; and has stock options from Kodiak Sciences. **JFK** is a consultant for AbbVie, Apellis, Bayer, Carl Zeiss Meditec AG, Eyepoint Pharma, Ocular Therapeutix, Ocuphire, Opthea, Roche, and Théa Pharmaceuticals; and serves on the data safety monitoring/advisory board for Alexion, Novo Nordisk, and Opthea. **WLC** is a consultant for Genentech and Regeneron Pharmaceuticals; has received research support from Genentech; is a speaker for Bayer, Genentech, and Regeneron Pharmaceuticals; and has received travel support from Bayer, Genentech, and Regeneron. **SS** receives funding/fees from Allergan, Apellis, Bayer, Biogen, Boehringer Ingelheim, EyeBiotech, Novartis, Optos, and Roche. **SL**, **XZ**, and **PMW** are employees of Bayer Consumer Care AG. **AJB**, **KC**, **AD**, **MH**, **AM**, and **AP** are employees of Regeneron**. AS** is a consultant for Allergan, Apellis, Bayer, Novartis, and Roche. **JW** is a consultant for 4DMT, Genentech/Roche, Neurotech, and Ocular Therapeutix; and has received research support from 4DMT, Adverum, Astellas, Aviceda, Bayer, Eyebiotech, Eyepoint, Genentech, Iveric, Kalaris, Kodiak, Lowy MRI, Neurotech, Ocular Therapeutix, Oculis, Opthea, Outlook Therapeutics, Regeneron, and Roche. **CT** and **USO** are employees of Bayer AG
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Background and Methods

- The purpose of the current analysis was to evaluate IOI-related events with aflibercept 8 mg and 2 mg through to 96 weeks
- Data from 3 multicenter, randomized clinical trials comparing the efficacy and safety of aflibercept 8 mg versus aflibercept 2 mg were pooled:
  - Phase 2 **CANDELA trial** in treatment-naïve patients with nAMD
  - Phase 3 **PULSAR trial** in treatment-naïve patients with nAMD
  - Phase 2/3 **PHOTON trial** in treatment-naïve and previously treated patients with DME
- Data were pooled through Week 44 of the CANDELA trial and through Week 96 of the PULSAR and PHOTON trials
  - **Overall, safety data for 1773 patients were evaluated**

	Aflibercept 2 mg pooled	8q12	8q16	Aflibercept 8 mg pooled[a]
CANDELA, n	53	53	0	53
PULSAR, n	336	335	338	673
PHOTON, n	167	328	163	491
Total, n	556	716	501	1217

Safety analysis set. [a]Three initial monthly injections followed by injections at Weeks 20 and 32. **8q12**, aflibercept 8 mg every 12 weeks; **8q16**, aflibercept 8 mg every 16 weeks; **DME**, diabetic macular edema; **IOI**, intraocular inflammation; **nAMD**, neovascular age-related macular degeneration.

Baseline Demographics and Aflibercept Exposure in the Pooled Safety Analysis

	Aflibercept 2 mg pooled (n=556)	Aflibercept 8 mg pooled[a] (n=1217)
Baseline demographics		
Female, n (%)	299 (53.8)	574 (47.2)
Age group, n (%)		
<65 years	141 (25.4)	349 (28.7)
≥65–<75 years	196 (35.3)	441 (36.2)
≥75 years	219 (39.4)	427 (35.1)
White, n (%)	412 (74.1)	927 (76.2)
Hispanic or Latino, n (%)	47 (8.5)	106 (8.7)
Aflibercept exposure		
Total number of injections	6464	10,067
Number of injections, mean (SD)	11.6 (3.1)	8.3 (2.1)
Treatment duration, mean (SD), weeks	84.1 (24.5)	86.8 (22.6)

Safety analysis set. [a]Aflibercept 8q12 and 8q16 combined. **SD**, standard deviation.

IOI-related Events in the Study Eye

	Aflibercept 2 mg pooled (n=556)	Aflibercept 8 mg pooled (n=1217)
Patients with ≥1 IOI-related event, n (%)	**9 (1.6)**	**16 (1.3)**
Iridocyclitis	2 (0.4)	4 (0.3)
Iritis	0	3 (0.2)
Anterior chamber cell	1 (0.2)	2 (0.2)
Uveitis	2 (0.4)	2 (0.2)
Vitreal cells	2 (0.4)	2 (0.2)
Vitritis	0	2 (0.2)
Chorioretinitis	0	1 (<0.1)
Endophthalmitis	2 (0.4)	0
Eye inflammation	1 (0.2)	0
Hypopyon	1 (0.2)	0
Severity of IOI-related events, n (%)		
Mild	7 (1.3)	12 (1.0)
Moderate	1 (0.2)	4 (0.3)
Severe	1 (0.2)	0

Of the patients who developed IOI with aflibercept 2 mg or 8 mg, 78% and 69% had recovered or were recovering at the time of analysis, respectively

Safety analysis set.

Conclusions

Incidence of IOI-related events	• Incidence of IOI-related events was **low and similar** between aflibercept 8 mg and 2 mg • **No cases of endophthalmitis were reported** with aflibercept 8 mg, 2 cases of endophthalmitis were reported with aflibercept 2 mg
Severity of IOI-related events	• **Most IOI-related events were mild in severity** for both aflibercept 8 mg and 2 mg, with 1 case of severe IOI reported with aflibercept 2 mg • **Most of the patients** receiving aflibercept 8 mg and 2 mg, who developed IOI-related events **fully recovered or were recovering** at the time of analysis
Safety profile	• Overall, **aflibercept 8 mg demonstrated comparable safety** to aflibercept 2 mg for up to 96 weeks across the CANDELA, PULSAR, and PHOTON trials